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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/064,731

08/12/2002

Francois Charette

200-1297 RLC

6580

22844

7590

03/25/2005

FORD GLOBAL TECHNOLOGIES, LLC.  
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EXAMINER

CHARIOUI, MOHAMED

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

11A

<b>Office Action Summary</b>	Application No. 10/064,731	Applicant(s) CHARETTE ET AL.	
	Examiner Mohamed Charioui	Art Unit 2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 November 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2 and 4-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-13 and 15-20 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 August 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. Applicant cancelled claim 3.

### **DETAILED ACTION**

#### **Abstract**

2. Abstract of the disclosure is objected to because it contains more than 150 words.

Abstract of the disclosure is a brief narrative of the disclosure as a whole in single paragraph of 150 words or less commencing on a separate sheet (see MPEP 608.01(b) ).

#### **Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 4, 5, 10 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rayment (U.S. 5,551,298) in view of "NVH Reduction Trends" ([http://www.sae.org/automag/nvh\\_reduction/03.htm](http://www.sae.org/automag/nvh_reduction/03.htm)).

**As per claims 1, 4, 10 and 11**, Rayment teaches imparting energy to the product to simulate an in use condition of the product (see col. 1, lines 45-58); measuring the sound emitted from the product (see col. 3, lines 25-43 and col. 4, lines 39-48); establishing a threshold metric generating an objective metric based on the measured sound includes the steps of acquiring sound data for a defined time period (see col. 1, line 45 to col. 2, line 11); comparing the objective metric with the threshold

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metric; and generating feedback, the feedback including information relating to the comparison of the objective metric and the threshold metric (see col. 1, lines 61-67 and col. 3, lines 25-43).

Rayment fails to teach computing the objective metric based on an N10 loudness scale from the acquired sound data.

"NVH Reduction Trends" teaches this feature (see page 3, 5<sup>th</sup> paragraph). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate "NVH Reduction Trends"'s teaching into Rayment's invention, because it would provide sound data measurements N10 loudness scale. Therefore, changes in peaks of the vibration sound levels would be indicated and performance of the product would be evaluated.

**As per claim 5**, Rayment further teaches performing statistical processing based on the saved information; and preparing reports based on the saved information (see col. 1, lines 59-67).

4. **Claims 2, 6-8, 12, 13, and 15-20**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Rayment in view of "NVH Reduction Trends" and Hamada et al. (U.S. 2004/0015251).

**As per claims 2, 6-8, 12, 13, 15, 18 and 19**, Rayment in view of "NVH Reduction Trends" teach the system as stated above except for performing any repairs necessary to the product such that the noise level of the product meets acceptable noise level standards.

Hamada et al. teach this feature (see paragraphs [0017] and [0029]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Hamada et al.'s teaching into Rayment in view of "NVH Reduction Trends"'s teaching, because it would repair the product defect. Therefore, the noise cause by the product abnormality would be reduced or eliminated and the product noise level would within the product acceptable noise level range.

**As per claims 16, 17 and 20**, Rayment further teaches saving data relating to each vehicle tested including, the objective metric, threshold metric, and any diagnosis and repair; and performing a statistical analysis on the saved data (see col. 1, lines 45-67).

#### ***Allowable Subject Matter***

5. **Claim 14** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: none of the prior art of record teaches or suggests using a graphical user interface and standardized list of descriptors to input into the data acquisition apparatus information pertaining to the diagnosis and repair, in combination with the rest of the claim limitations.

#### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1, 2 and 4-20 have been considered but are moot in view of the new ground(s) of rejection.

**Prior art**

7. The prior art made record and not relied upon is considered pertinent to applicant's disclosure:

Mantooth et al. ['724] disclose component-based analog and mixed-signal simulation model development.

**Contact information**

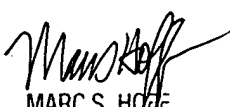
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed Charioui whose telephone number is (571) 272-2213. The examiner can normally be reached Monday through Friday, from 9 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mohamed Charioui

2/22/05

  
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